What is claimed is:

A metal contact for a copper alloy surface, comprising:

 an electroplated barrier layer having a thickness ranging from about 0.00001
 inch to about 0.0001 inch, wherein the barrier layer is selected from the group consisting of cobalt, cobalt-nickel alloys, cobalt-tungsten alloys, cobalt-nickel-tungsten alloys, and rhodium.

- 2. The metal contact of claim 1, wherein the barrier layer thickness is 0.000025 to 0.0001 inch.
 - 3. The metal contact layer of claim 2, wherein the barrier layer is cobalt.
 - 4. The metal contact of claim 2, wherein the barrier layer is a cobalt-nickel alloy.
- 5. The metal contact of claim 2, wherein the barrier layer is a cobalt-tungsten alloy.
- 6. The metal contact of claim 2, wherein the barrier layer is a cobalt-nickel-tungsten alloy.
 - 7. The metal contact of claim 1, further comprising an outer layer.
- 8. A method of forming a metal contact having a barrier layer ranging from about 0.00001 inch to about 0.0001 inch, comprising the steps of:

providing a substrate; and

electroplating a barrier layer on the substrate, wherein the barrier layer is selected from the group consisting of cobalt cobalt-nickel alloys, cobalt-tungsten alloys, cobalt-nickel-tungsten alloys, and rhodium.

- 9. The method of claim 8, further comprising the step of performing a light acid etch before the step of electroplating.
- 10. The method of claim 9, further comprising the step of activating the surface before the step of electroplating.
- 11. The method of claim 8, wherein the cobalt is electroplated at a current density of about 10-150 amperes per square foot.
- 12. The method of claim 11, wherein the plating bath includes a cobalt sulphamate, cobalt sulfate, and for cobalt chloride.
- 13. The method of claim 12, wherein the plating bath further includes tungsten salt, organic acid, and ammonium oxide.
 - 14. The method of claim 13, wherein the tungsten salt is sodium tungstate.

- 15. The method of claim 14, wherein the organic acid is citric acid.
- 16. The method of claim 12, wherein the plating bath further includes nickel sulfamate, nickel sulfate, and /or nickel chloride and organic additives.
 - 17. The method of classifier, wherein in the substrate is copper.
- 18. The method of claim 8, further comprising the step of providing an outer layer in contact with the barrier layer.
- 19. The method of claim 17, wherein the outer layer is selected from the group consisting of tin, gold, palladium, platinum, silver, and combinations thereof.
 - 20. The method of claim 19, wherein the outer layer is tin.
- 21. The electrical contact of claim 8, wherein the outer layer is selected from the group consisting of tin, gold, silver, platinum, palladium and combinations thereof.

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